

**AMENDMENTS TO THE CLAIMS**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method for load balancing code execution, said method comprising:

compiling a first source code subtask and a second source code subtask, the compiling resulting in a first byte code subtask and a second byte code subtask;

determining whether to store a pointer in a byte code file, the pointer including a stored location that corresponds to the second byte code subtask;

storing the pointer in the byte code file in response to the determination;

storing the second byte code subtask at the stored location in response to the determination;

translating the first byte code subtask to a first object code subtask;

executing the first object code subtask using one of a plurality of heterogeneous processor types;

during the execution of the first object code subtask, the method further comprises:

retrieving the pointer and analyzing the stored location;

in response to analyzing the stored location, retrieving the second byte code subtask using a runtime loader;

in response to retrieving the second byte code subtask, using the runtime loader to identify a processor type from the plurality of heterogeneous processor types in which to execute the second byte code subtask, wherein the identifying includes

retrieving a loading factor for each of the plurality of heterogeneous processor types and determining an availability of each of the plurality of heterogeneous processor types using the loading factors;

in response to identifying the processor type, using the runtime loader to translate the second byte code subtask to a second object code subtask; and

loading the second object code subtask into a processor that corresponds to the identified processor type[[],].

~~determining whether to store a pointer in a byte code file, the pointer including a stored location that corresponds to the second byte code subtask;~~

~~storing the pointer in the byte code file in response to the determination;~~

~~storing the second byte code subtask at the stored location in response to the determination; and~~

~~performing the retrieving using the pointer, wherein the retrieving includes analyzing the stored location and retrieving the second byte code subtask in response to the analyzing.~~

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